Mr. Dhana

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DERWENT-ACC-NO:

1997-198792

DERWENT-WEEK:

200048

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TITLE:

Load drive unit e.g. EL element in

display apparatus -

in which anode and cathode voltage of

power supply is

selected using selection output unit

for driving EL

element

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PATENT-ASSIGNEE: NIPPONDENSO CO LTD[NPDE] , DENSO CORP[NPDE]

PRIORITY-DATA: 1995JP-0206344 (August 11, 1995), 1995JP-0168822 (July 4, 1995), 1995JP-0206345 (August 11, 1995), 1996JP-0117979 (May 13, 1996)

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PUB-NO			PUB-DATE	
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JP	09054565 2	<del>I</del>	February 25, 1997	N/A
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US	6121943 A		September 19, 2000	N/A
	000	G09G	003/30	
US	5847516 A		December 8, 1998	N/A
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US	6064158 A		May 16, 2000	N/A
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PUB-NO	APPL-DESCRIPTOR	APPL-NO
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JP 09054565A	N/A	
1995JP-0206344	August 11, 1995	
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US 5847516

INT-CL (IPC): G09G003/10, G09G003/12, G09G003/30

RELATED-ACC-NO: 1997-198793, 1997-232724

ABSTRACTED-PUB-NO: JP 09054565A

## BASIC-ABSTRACT:

The drive unit uses a power supply (1) whose anode is opened/closed by a first

FET (2). The cathode of the power supply is opened/closed by a second FET (3).

The first and second FETs are turned ON according to the control signal, alternately.

The anode and cathode voltage of the power supply is selected using a selection output unit (9) for driving an EL element (100).

ADVANTAGE - Outputs AC voltage of positive/negative suing one power supply.

ABSTRACTED-PUB-NO: US 5847516A

## **EQUIVALENT-ABSTRACTS:**

The appts has an electroluminescent layer. A pair of scanning electrodes

(201,301) are formed on each side of the electroluminescent layer. A pair of

data electrodes (401,402) are formed on other sides of electroluminescent

display panel. These scanning electrodes are orthogonal to the data electrode.

The electrode luminescent element are connected between the scanning electrode

and the data electrode. A pair of scanning electrode drive circuit (2,3) apply

a scanning voltage to these scanning electrodes sequentially while reversing

the polarity between adjacent fields. A data electrode drive circuit (4) outputs the data voltage to multiple data electrodes.

The display elements are selectively activated depending upon the relationship between data voltage and the scanning voltage. The scanning voltage and the data voltage are derived from a voltage supply circuit (5-7). In a positive field, a scanning voltage (Vr) with positive polarity is supplied and it is higher than the offset voltage (Vm). At the light emission, the voltage applied on the scanning side drivers (IC2, IC3) is Vr-Vm.

ADVANTAGE - Reduces breakdown voltage by offset voltage.

## US 6064158A

The appts has an electroluminescent layer. A pair of scanning electrodes (201,301) are formed on each side of the electroluminescent layer. A pair of data electrodes (401,402) are formed on other sides of electroluminescent display panel. These scanning electrodes are orthogonal to the data electrode. The electrode luminescent element are connected between the scanning electrode and the data electrode. A pair of scanning electrode drive circuit (2,3) apply a scanning voltage to these scanning electrodes sequentially while reversing the polarity between adjacent fields. A data electrode drive circuit (4) outputs the data voltage to multiple data electrodes.

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ADVANTAGE - Reduces breakdown voltage by offset voltage.

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The display has an electroluminescence display field with a number of scanning electrodes (201) on one side of a light output film, data electrodes (401) on a second side and electroluminescence elements (111) at points at which the scanning electrodes and data electrodes cross.

Control circuits (2,3,4) sequentially apply a scanning signal of different polarity to the scanning electrodes and a data signal to the data electrodes to selectively cause the electroluminescence devices to emit light. The sensing signal is fed to the scanning electrodes by feeding constant charging and discharging currents to the scanning electrodes to charge and discharge the electroluminescence elements.

ADVANTAGE - - Reduces charging and discharging times whilst overcoming the problems of heat generation and step current when the scanning signal is applied.

CHOSEN-DRAWING: Dwg.1/7

TITLE-TERMS: LOAD DRIVE UNIT ELECTROLUMINESCENT ELEMENT DISPLAY APPARATUS ANODE CATHODE VOLTAGE POWER SUPPLY SELECT SELECT

OUTPUT UNIT DRIVE

ELECTROLUMINESCENT ELEMENT

DERWENT-CLASS: P85 T04 U14

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